Lesson 85 - The Dangers Of A High-Protein Diet

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1. Introduction

1.1 A Case of Protein Poisoning

David looked really bad. His face was covered with red, rash-like bumps and his eyes were swollen. "My mouth and throat," he said, "feel like you poured burning chemicals down them. I woke up in the middle of the night and couldn't breathe," he gasped, "and my nose feels like a huge sore."

David thought he had an allergy, but there was another name for his condition—*proteinosis*, or poisoning by protein foods.

It was the week after Thanksgiving and David had been to a family reunion. "I never ate so much turkey and ham in my life," he told me. "Everybody brought platters and platters of meat, and I had to sample them all. I also ate a lot of desserts. It must have been something in the food I was allergic to that made my face swell up like this."

It was indeed "something" in the food that had caused David's condition, but it wasn't some mysterious hidden allergen. No, what made David so sick, so miserable was simply an *excessive amount of animal protein*.

Protein in large amounts, and of the wrong type, can poison you as surely as any other substance taken in excess of the body's true needs. In fact, what many people call allergies are often symptoms of proteinosis. When you consider the super-high protein diet that most people in this country eat, it is no surprise that a majority of the population is suffering from a continual low-level of protein poisoning.

That's right—protein, the food item so widely hailed and promoted by nutritionists and meat industry spokesmen, can cause serious harm when ingested in amounts in excess of the body's needs.

1.2 Too Much Of A "Good Thing"?

You've heard bad stories about fats in the diet, and even carbohydrate foods (especially refined sugars and starches) take a beating from weight-conscious individuals. But you probably never thought you would hear a bad word about protein.

Protein does the glamour jobs in the body. It builds muscle, hair, skin, and nails. Enzymes, hormones, hemoglobin, and antibodies are also made from protein, and everyone knows that protein (or amino acids) is essential for the healthy growth of the young.

All true. Protein does a vital job of keeping the body maintained, but *it is required in far lower amounts than commonly consumed by the average person*.

Well, so what? If protein is so vital for our well-being, then doesn't it make sense that a lot more protein would make you a lot more healthy? After all, you really can't get too much of a good thing, can you?

As with anything else taken into the body, the nutrient protein must either be used, stored, or eliminated by the body. If more protein than can be used is eaten, then it is converted into stored fuel for the body. Along with this converting of protein to stored fuel, toxins or nitrogenous waste products are produced from the extra protein. The toxins or by-products from this protein conversion consist of nitrogen or ammonia-like compounds, and are eliminated from the body via the kidneys.

When protein is consumed in greater amounts than can be processed, toxicity of the blood will result from the excessive amount of nitrogen in the blood. Excessive nitrogen impairs working capacity, and the accumulation of a nitrogen product, kinotoxin, in the muscles, causes fatigue.

Partially or incompletely digested proteins cannot be assimilated, and poisons are absorbed into the blood. Various symptoms of protein poisoning are experienced by different individuals, including burning of mouth, lips and throat, skin symptoms, nasal symptoms, and other signs of intolerance of certain foods and other substances, known as allergies.

In *proteinosis*, or acute protein poisoning, there is general aching and a bad headache. Hyperproteina is caused by incompletely digested protein due to impaired digestion or bad combination of foods and may be thrown off as mucus, and might also cause aching and headaches.

Can you get too much of a good thing? If the "thing" is protein, the answer is yes. High protein intake forces extra work on the body. It must convert the protein to fuel and eliminate the harmful acids created in the process of digestion. Acid saturation of the body cells, due to excessive protein intake, can quite simply cause death. Perhaps a better question is: how "good" a thing is protein anyway?

2. The Problems With Protein

The following conditions may result from too much protein in the diet:

1. Heart disease
2. Kidney damage
3. Constipation
4. Tumors and cancerous growths
5. Biochemical imbalances in the tissues (overacidity)
6. Arthritis
7. Bone-loss (osteoporosis)

Let's look at some of these problems caused by an excessive protein diet in more detail.

2.1 Eat Your Meat, Lose Your Bones

As people on a traditional diet grow older, they often experience "bone loss" or *osteoporosis*. Bone loss usually occurs more often in elderly women than anyone else, but almost everyone who eats a high-meat and protein diet will suffer from some amount of bone loss, and this includes children as well as mature adults.

Bone loss, or osteoporosis, occurs when calcium is removed from the bones of the body in order to fulfill the body's metabolic requirements for this stored mineral. Why does the body need so much calcium that it must rob its own bones?

Quite simply, the answer, according to medical researcher Dr. Robert Heaney, is that "the more protein you take in, the more calcium you excrete." His studies have shown that a diet that contains 50% more protein than is needed may result in as much as *one percent loss of bone per year.*

Since almost every woman (and man) in this country exceeds the 50% excessive protein amount, bone loss does occur in about 98% of the population,. What are the dangers of the bone loss?

One of the most obvious signs of bone loss occurs around the teeth and under the gum lines of the mouth. As bone is lost or removed from the jaw, the teeth loosen and eventually decay or fall out. Most so-called gum disease in this country comes from bone loss.

Another very obvious danger of bone loss is the tendency of older people to crack their bones after a minor fall. The hips especially are susceptible to bone loss in elderly women, and there have been many instances where these women's hips have actually snapped under the body's own weight.

A high-protein diet can cause a total bone loss of 1 % or more per year. This means that a normally healthy woman of 25 years could lose up to *half* of her bone structure by the time she reaches 75 years, if she continues to eat the typical high-meat, high-protein diet of twentieth-century America.

2.2 Protein: A Kick In The Kidneys

If protein is not needed by the body for tissue synthesis (or rebuilding the body), it is returned to the liver. In the liver a process called *deamination* takes place which separates the amino acids into a nitrogenous residue and non-nitrogenous residue. The nitrogen portion undergoes a series of chemical changes and is converted into urea by the liver and excreted in the urine.

Intake of protein greatly in excess of the body's needs creates extra work for the liver. Excessive protein also creates extra work for the kidneys. Ideally, it is their job to remove excess acids, the deaminated group of chemicals being most suitably disposed of when excreted as urea.

When a high-protein diet is followed, the kidneys soon become overworked as they try to eliminate all the toxic by-products of protein metabolism.

David A. Phillips, a Hygienist author and lecturer from Australia, observes that: "The premature breakdown of kidneys in the Western world no longer surprises one when it is realized that the body's protein intake has risen all out of proportion to its needs." This condition is unfortunately compounded when the nature of the protein is more complex and more prone to create a high-acid residue, such as characterizes animal proteins.

Dr. Herbert M. Shelton, writing on the effects of a high-protein diet on the kidneys, states: "In middle-aged adults perfectly normal kidneys are the exception rather than the rule. By a careful selection of a low-nitrogen (low-protein) diet, it is possible to reduce the amount of work required of the kidneys to a level at which they are able to keep the waste products in the blood within normal limits."

Uric acid in the bloodstream, besides overworking the kidneys, is a preliminary to the later development of gout or arthritis, both conditions being invariably traceable to excessive, unsuitable protein in the diet.

2.3 Protein: Are Those Just Rumors About Tumors?

According to a recent popular survey, one of the things that Americans fear more than death itself is cancer and the painful, lingering death that ensues.

And no wonder. Cancer seems to creep up on us in the twilight of our lives—silent, unwarning, implacable, and uncontrollable. It is the death sentence that twentieth century man passes upon himself,

and we fear it as much as any inevitable executioner or, faceless murderer.

Yet we create cancer in our own bodies with every bite we take of processed, refined, and preserved foods. And the biggest offenders are the traditional high-protein foods—cheese, eggs, and especially meat.

In 1982, the National Academy of Sciences suggested that there is a *strong* link between animal product foods high in protein and occurring cancers of the breast, prostrate, and colon. In fact, Dr. Colin Campbell, a member of the panel who studied the link between diet and cancer had this to say:

"The weight of the evidence certainly points to a link between high-protein foods and resultant cancers.

You don't hear too much about it because consumption of animal products is a big industry in this country. It's also a status symbol. But the result is that there's a higher level of breast cancer here than in countries where people eat fewer animal products."

By now it should be old news that cancer is related to the consumption of animal products high in fat (meat, dairy products, eggs, etc.). Heavy beef eating is directly related to the high incidence of colon and rectum cancer in this and other predominantly meat-eating populations. Almost ten years ago, Dr. Ernest Wynder announced to the Greater Boston Medical Society that dietary fat and animal protein combine with bacteria in the colon to form acids which are linked to tumor formations. He also said that evidence furthermore shows that such high-protein, high-fat foods are also implicated in tumors of the breast, pancreas, kidneys, ovaries, and prostrate.

Although animal protein is the biggest offender, all high and concentrated protein foods have the potential of becoming carcinogenic. *Excessive* protein, whether from animals or vegetable sources (seeds, nuts, beans, grains), decomposes or rots in the stomach and turns into poisonous ammonia. This ammonia in turn produces *nitrosamines*. Nitrosamines, according to biochemist Dr. Lijinsky, are "among the most potent cancer-causing chemicals known."

Malignant tumors require amino acids for growth that only protein foods can supply. The high-protein requirement for cancerous growths comes, as a rule, from eating animal carcasses (meat). Tumors have been described by some researchers as "traps" for excess nitrogen in the body. In controlled experiments, the rate of a tumorous growth increased twice as fast when concentrated protein was added to the diet.

Many recovered cancer patients must limit their protein intake so severely that they cannot eat even the vegetable foods high in protein. In her book *How I Conquered Cancer Naturally*, Eydie Mae Hunsberger described how fasting and a raw food diet allowed her to overcome breast cancer. In the book, she states how she must avoid all high-protein foods, even peas and beans. "I go easy on the proteins," she said, "because cancer patients have a protein digestive problem. Soy products, for example, are too high in protein for me. If I want protein foods, I choose avocados, almonds, sunflower seeds, and sprouts."

The demand for protein by cancerous cells is almost *ten times* the amount as required by healthy tissues. Sufficient protein builds healthy bodies. Excessive protein builds tumors.

2.4 The High-Protein, Low-Health Weight-Loss Diet

By just following the typical United States diet of heavy animal foods, meat, and dairy, you will experience many problems associated with a high-protein diet. The average American woman consumes 50% more protein than the Recommended Daily Amount (RDA), while the typical male will eat almost 100% (twice as much) more protein than the RDA. Please remember that all RDAs are set intentionally "high" to make sure that people get all the nutrients they need. Even by these high standards, Americans are heavy protein eaters.

Yet there are some people who intentionally consume *even more protein*!

Athletes, weight-lifters, and body-builders are some of the people who consciously eat extra high-protein foods in a mistaken belief that such foods are needed for energy. Yet there are some people who

increase their protein intake and reduce their carbohydrate intake in a bizarre effort to lose weight fast. On such a diet, weight-loss and a health-loss do occur.

The rationale of high-protein diets for weight loss, such as the Stillman high-protein diet or Dr. Linn's liquid protein diet, is based on the fact that protein requires much more body energy for digestion and metabolism than it supplies.

The body's first nutrient need is for fuel—carbohydrates. When excessive protein is eaten instead of needed carbohydrates, the body will try to convert the extra protein into a carbohydrate-type of fuel source. This conversion process is a difficult and energy-expending one for the body, and so a net-calorie or weight loss may occur.

The problem with this attempt at weight loss with a high-protein diet is that harmful by-products are produced in the protein to carbohydrate conversion process. Dr. Robert R. Gross, Ph.D., New York professional Hygienist, stated the problem this way: "The hitch is the end products of protein digestion are acidic—urea, uric acids, adenine, etc., which, beyond a certain normal range, will cause degeneration of body tissues, producing gout, liver malfunctions, kidney disorders, digestive disturbances, arthritis and even hallucinations."

Dr. D. J. Scott, D.C., N.D., Ohio professional Hygienist, also agrees that weight-loss through high-protein diets is a dangerous practice. He says: "Too much protein solidifies (like coffee) and has the same stimulating effect, and a high-protein diet will eventually destroy the glandular system, and damage the liver, adrenals and kidneys."

2.5 You Can't Fool The Body!

High-protein diets for weight-loss are all based on fooling the body. Instead of giving it the carbohydrate fuel it needs, you fill the body with acid-forming protein that must be expensively converted into fuel within the body. It's like pouring water into your gasoline tank and hoping that your car will try to turn it into suitable fuel. Your body does try, but it really can't be fooled. Consider these latest research findings:

At the Massachusetts Institute of Technology, a husband and wife research team, Drs. Judith and Richard Wurtman, discovered that you simply cannot deny the body carbohydrates in preference to protein. In a controlled study, the researchers studied people who were denied carbohydrate foods (such as fruits, potatoes, etc.) and fed protein foods instead.

After a few days, the people on the no-carbohydrate diet did indeed lose weight. But they also developed such strong cravings for any kind of carbohydrates that they uncontrollably ate sugary and starchy foods in such amounts after the diet that they gained all their weight back.

In the January 1983 issue of the *Journal of Nutrition*, the MIT researchers concluded that carbohydrate-starvation caused by a high-protein weight-loss diet actually creates a chemical imbalance in the brain.

This imbalance drives people to seek out carbohydrates (which is only natural since carbohydrates are our most efficient fuel source). The desire for a predominantly carbohydrate, low-protein diet is inherent in the human make-up, and it cannot be fooled by a high protein diet.

The article in the journal also suggested that instead of a high-protein approach to weight loss, a more natural and healthy approach would be to eat small amounts of naturally occurring *high-carbohydrate* foods (such as fruits) and forget about the protein.

2.6 The Ultimate High-Protein Diet

What's worse than a high-protein, low-carbohydrate diet for losing weight? Answer: An *all*-protein diet.

Incredible as it may seem, there were thousands of people in the late 1970s who followed a high-protein, weight-loss diet that consisted of nothing more than highly-processed animal protein, sugar, and

artificial coloring.

Called "liquid protein," the only foods consumed in this diet were vials of animal extracts that contained hooves from cows and other animal waste products from slaughter houses. This "protein" (actually the unusable by-products from meat-packing) was liquified or melted down and then artificially flavored and colored so that it would taste like a grape or cherry soda. You can imagine how melted cow hooves would taste—small wonder that they had to disguise the obnoxious odors and sickening taste of such a product.

Each day, a person would open a plastic tube of this pure protein "gunk" and squeeze it down the throat. The protein syrup would fill the person up at a low-calorie cost, and weight loss would follow.

Unfortunately, not only did weight loss occur, but so did vomiting, dehydration, muscle cramps, nausea, dry skin, and loss of hair.

In the late 1970s, the liquid protein diet craze was at its peak. Thousands and thousands of vile vials of grape- and cherry-flavored protein were sold to gullible men and women who proceeded to wreck their health on a dangerous 100% protein diet.

To be certain, these people were also losing weight. And some even lost more.

In Dix Hills, New York, Donna Cochran began an eight-month Super Pro-Gest liquid protein diet. First Mrs. Cochran lost sixty pounds on the diet. Then she lost her life. She dieted because of heart complications brought about by the all-protein diet. Her husband and son sued and received $55,000—a small amount indeed for a loved one's life.

Liquid-protein diets can cause hard-to-detect, and possibly fatal, heart problems. The all-protein diet, disrupts the body's mineral balance, and drastically reduces the potassium level. This dangerously reduced potassium level leads to arrhythmia, or the abnormal beating of the heart.

The liquid or all-protein diet was first developed by a doctor who got the idea from intravenous feeding. Just like intravenous feeding, the liquid-protein diet is an unnatural and debilitating practice. Fortunately, word has now gotten around about the dangers of this all-protein diet trick. Unfortunately, people still believe in the power of a high-protein, low-carbohydrate diet for weight loss, and think it is safe.

3. The True Needs Of The Body

3.1 Carbohydrates—Not Protein

Carbohydrates in their natural forms of fresh and dried fruits and some vegetables should always be used in preference to concentrated protein foods. People who consciously reduce the amount of complex carbohydrates in the diet and eat more protein foods instead in an attempt to lose weight or "improve" their health are playing a dangerous game. Listen to what Dr. Helen C. Kiefer of the Northwestern University Medical School has to say about the relative importance of carbohydrates and proteins in a well-balanced diet:

"Carbohydrates must not fall below a certain limiting amount in any diet, or we run the risk of ending up in an unhealthy metabolic state; or, perhaps worse over the long run, we may waste the body's protein stores from tissues such as muscle to prevent this unhealthy metabolic state."

"Proteins, unlike carbohydrates or fats, contain the element nitrogen. When we strip this nitrogen from the amino acid components of proteins in order to convert them to carbohydrates for energy, we run the risk of building up ammonia in our bloodstreams. Ammonia is highly toxic.

After detailing the dangers of ammonia and other protein by-products in the bloodstream, Dr. Kiefer gives this unqualified endorsement of a predominantly carbohydrate-based diet over the typical protein diet used for both weight loss and as a regular diet by so many people:

"An appropriate level of the oft-maligned carbohydrate is perhaps the best protection in any diet. It protects the need of the brain cells for carbohydrates; the need to metabolize fats for energy without increasing the acid load of the bloodstream; the protection of protein in tissue and the prevention of excess nitrogen excretion when protein components (amino acids) must be used for energy."

3.2 Sufficient Protein: It's Easy!

Protein needs and requirements are incredibly low for a healthy person. In fact, one measure of a person's health is how much protein they must consume to maintain their body weight. Sick and diseased people crave large amounts of protein for stimulation for their exhausted bodies. Healthy people, on the other hand, can function very well on about one-fifth of the protein the average American consumes.

How can we make sure that we get enough protein, but not too much? Easy. Just eliminate all substandard, harmful, and processed foods from the diet and eat an abundance of fresh fruits with some vegetables, sprouts, and nuts or seeds (if desired). All of these foods can be eaten in their raw state, and (with the exception of nuts and seeds) are low in concentrated protein. Yet these foods do supply all the essential amino acids that we need for a healthy life. More importantly, the foods of the Life Science diet supply us with an abundance of natural carbohydrates—our body's number one nutrient need. In addition, we receive a full array of vitamins, minerals, enzymes, and yet undiscovered elements from these fresh and wholesome foods packaged by nature.

A true protein deficiency on a calorie-sufficient diet is a rarity. Cancers from a high-protein diet are all, too common. Say "No!" to the propaganda and misinformation that is circulating about any supposed benefits of a high-protein diet. Say "Yes!" to the health-promoting and nutrient-abundant diet of fresh raw fruits, vegetables, sprouts, and seeds.

4. Questions & Answers

I feel so good after eating several high-protein meals. I feel like I could fight a tiger! How could that be bad?

> There is a very good reason that you feel so "energetic" or stimulated after a high-protein meal. The chemical composition of uric acid, a by-product of protein metabolism, is remarkably similar to that of caffeine. You're not getting any energy from the high-protein meals, you're receiving chemical stimulation. Heavy protein eaters are always "high" on drugs—either from the stimulating effects of the uric acid by-products, or they may actually become intoxicated on the alcohol that forms in the body from protein fermentation. And please—don't go around fighting any tigers; they're almost as dangerous as those high-protein meals you're putting away.

Well, then, is protein bad? Should I just not eat any protein foods ever again?

Better not stop eating all protein foods, or you may go hungry! All our biologically-correct foods (such as fruits, sprouts, vegetables, etc.) contain ample protein in the form of easily assimilable amino acids. No, protein is not "bad." But protein from animal sources is harmful because of all the accompanying toxins, fats, etc. And excessive protein, whether from plants or animals, is always harmful.

Okay, so how much protein is too much? What do you mean by excessive?

If you eat any of the foods that are not suitable for our physiology (and this includes all meats, dairy products, eggs, and other animal products), then you will be getting too much protein. If you overeat the substandard foods such as legumes and grains, you will be getting more protein than is probably needed. To guard yourself against excessive protein intake, follow these simple rules: 1) Never eat any animal products. 2) If you eat concentrated protein foods from the plant kingdom, such as beans, peas, grains, soy products, then eat these no more than once every day or two. 3) Do not overeat on nuts and seeds. If you want more calories, or need to feel "full," then reach for some fruits, fresh or dried, instead of more nuts.

I was believing most of what you said until you told me that protein causes cancer. Come on! Everybody eats protein and we've eaten lots of it over the years. Why don't we all drop dead from cancer?

There is no single cause for cancer or any other illness. All such conditions take years of poor living, eating, and exercise habits to develop. The facts are this: Most cancer patients have a history of moderate to heavy meat-eating with liberal use of fatty animal products and processed protein foods. Dr. Frank Madden of the Egyptian School of Medicine in Cairo, Egypt, conducted an extensive study of cancer throughout Egypt. He found that the tribes in Egypt who lived on an almost exclusively vegetarian diet (the Sudanese and Berberines) never experience cancer. Never. On the other hand, cancer was very common among the Arabs and Copts who followed the traditional high-protein, high-meat European diet. You cannot say that protein "causes" cancer, nor can you even say that meat-eating causes cancer. But you can most assuredly state that the usual overall lifestyle and attitude that accompanies heavy meat and protein eating certainly seems to foster the development of all forms of cancer throughout the world.

One last question. My friends and I have tried the high-protein diet in the past for weight loss. We only stayed on the diet for about six weeks, and we lost ten to fifteen pounds. It does work! Shouldn't we judge only by the results?

This reminds me of a story about a salesman who went door to door, selling what he said was a guaranteed method of weight loss. He sold a small box that would take off pounds or your money back. Inside the box was a knife and the following instructions: "1) Sterilize knife. 2) Carve away unwanted pounds."

Hopefully, all of his customers took the package as a joke or novelty item. Unfortunately, it does illustrate how far some people will go to lose weight without changing the conditions that brought about the weight gain. Sure, a high-protein, low-carbohydrate diet will shed pounds, but you are not reducing—you're wasting away and wrecking your health. Are you sure these are the results you want?

Article #1: The Enigma Of Protein by T.C. Fry

Even though the truth about protein as delineated in this article, and its role in human nutrition, have been known for nearly a century, there still rages a conflict and welter of confusion on the subject.

The misconceptions are primarily fostered by commercial businesses that are selling protein products, primarily meat and milk products. Even our American government serves these entrenched interests. The truth will not drown but ever keeps rising to fuel the fire of this controversy.

At the outset I would like to dispel some of the prevalent myths about protein.

MYTH NO. 1: We must have meat for best health. The argument goes that the best source for protein is meat inasmuch as it has all the requisite amino acids in a very assimilable form. Even the eminent (in so-called health food circles) Carlton Fredericks has gone on record as stating that the more nearly the composition of the flesh is to human flesh the more wholesome it is for us. Of course there was never a better argument made for cannibalism than this!

The "we must have meat" argument is obviously good for the meat-packing industry but it is patently absurd—the argument obviously destroys itself. If this were true every species could live from other animals but best of all from its own kind! The fact that almost all animals, including humans, do not have the anatomical and physiological equipment to make good use of any kind of meat is conveniently overlooked or denied. Cattle, rabbits, elephants, horses, etc., are herbivores and are equipped only for a leaf/grass diet. There are a class of graminivores, primarily birds, that thrive on the grains of various grasses. There are other animals that thrive on fruits. And so it goes. Every animal has a class of food to which it is adapted.

Humans are anatomically and physiologically adapted to a diet of fruits, vegetables and nuts and can profitably use certain seeds and legumes under certain conditions. That this is true is denied by commercial interests and their "scientific" apologists. An educated populace would bring an end to their niche in the marketplace.

Not even carnivores thrive on an all-meat diet. For humans, meat is a pathogenic and deficient food.

MYTH NO. 2: We must have all the essential amino acids at every meal. This argument is based on two premises: (A) That the body does not store protein or amino acids and (B) that, in order to synthesize protein, no more protein can be created by the body than the amount creatable as determined by the least bountiful supply of the essential amino acids. Every protein link requires so much of such and such amino acids and if any are missing from the meal, no proteins requiring these amino acids can be synthesized. This argument, too, is absurd. *It is not necessary to point out with detail that man and animals fast for lengthy periods and that, instead of suffering protein deficiency, the end of the fast finds them with restored protein balance!*

MYTH NO. 3: A high-protein diet is healthful and the body requires about one gram of protein for each two pounds of body weight. Obviously the body needs only what it needs and can use no more than what it needs. This "just right" amount of protein has been determined to be about one gram for each five pounds of body weight for mature humans of normal disposition. The one gram for each two pounds of body weight is about what a baby requires for maintenance and rapid growth. Obviously adults do not require as much. The belief in a high-protein diet or that we cannot get too much of it is a source of highly pathological eating practices among Americans and other peoples of the world.

It is fitting that we have this little tome to set aright the attitude of those whom it touches in this most crucial aspect of human nutrition.

Article #2: How Much Protein? A Critique of the Complete Protein Theory by David Barouh

The natural food movement is not new, by any means, but as it happens in civilization today, individuals are exposed to it at different times in their lives, and often it is a completely new concept for them. It is strange that it should escape so many people for so long that what we eat has so much to do with our state of health. But very few ever really knew what was in all the ready-made food they bought from the stores, and that the motives of the manufacturers of these foods, which would contain such ingredients as processed sugar in large amounts, animal fats, bleached flour, and long lists of chemical compounds used as artificial flavoring, coloring, preservatives, and other purposes not even listed, were ruthless, profiteering, without any concern for the health of the people who would eat them.

For many of us, when we first learn of the concept of taking care of our diet, and avoiding the processed monstrosities of the commercial food business, its beautiful simplicity affects us like a spiritual truth, and we become very anxious to learn about this science of diet which we took for granted or ignored for most of our lives. Thus we look to the various nutritionists and the advocates of the natural food movement as our authorities on diet and health. They sometimes take on a certain saintliness in our eyes, because they are the heroes of our new cause. But we may find as we progress further in our studies that there is considerable disagreement concerning diet and health among nutritionists and diet advocates; to the point, in many cases, of diametrical opposition. And so we come to realize that we should avoid the tendency to believe and follow the first bit of instruction that comes our way. Many people become frustrated over this very point, and find that they don't really know who or what to believe. In fact, a considerable amount of intuition proves to be indispensible, because most of the literature on diet and health is nothing more than the most dogmatic of pronouncements such as that we must have this vitamin or that mineral, which are contained in such and such foods, because they are necessary for this or that body function, and that such a deficiency will cause this or that specific set of symptoms or illness. The reader has none but the most impractical means of determining the accuracy of such statements, as well as the reasonings from which such conclusions were drawn. Most people simply accept such statements, never doubting that they are based on nothing but the most infallible scientific experimentation and deduction.

We can illustrate this point by examining one of the most important and misunderstood issues in the field of diet and nutrition; the subject of protein. It is maintained by scientists that protein is the main substance of which living organisms are composed. The protein molecule is a large molecule made up of different arrangements of what are called amino acids, of which we are told there are 22. Most nutritionists warn us to make sure we get enough of this substance in the food we eat so that we can grow and replace worn-out tissue in our bodies. Much of the hunger in the world is blamed upon a lack of protein in the diet, and anyone who is a vegetarian has most probably been asked, "But where do you get your protein?" Nutritionists say that the foods which contain the most protein, and in the most acceptable form, are animal foods, such as flesh, eggs, milk, and cheese. Vegetarians will abstain from eating these foods, and thus are said to run the, risk of serious illness because of this.

Now how should we determine how much protein we should have in our diet? Let's answer by asking another question: Is a high-protein diet native to human physiology?

To answer this it would be good for us to discuss the position we humans occupy in the animal kingdom. Our biological position in that kingdom is as a part of the Primate order, which means that our closest animal relatives, from the point of view of our anatomy, are the anthropoid apes. The "anthropoid" means "man-like" or, "resembling man." This group of animals, which includes the gorillas, the monkeys, the chimpanzees, the orangutans, etc., are classified as frugivores, which means fruit-eaters, as opposed to the carnivores, which means flesh-eaters, or the herbivores, which means grass and

vegetation-eaters.

Oddly enough, anthropologists have classified man as an omnivore, which means everything-eater, along with the pigs and the scavengers. This is because if we observe mankind, we will notice that he truly does eat everything from fruit to vegetables, to grains, to the milk of other animals, to eggs, and flesh. But if we compare the human digestive system to the rest of the primate order, or the frugivores, we find that they are identical. The intestines are 12 times the length of the trunk; the large intestines, or colon, is convoluted, slowing down the passage of food; the teeth are the same, the saliva is alkaline; and the skin has pores to aid in the elimination of wastes. The herbivores, such as the cows, the horses, the deer, etc., are similar but not the same. The length of their intestines are 10 times the length of their trunk.

The carnivores, on the other hand, are radically different, have intestines only 3 times the length of their trunk. Their colons are *smooth*, allowing wastes to slide right through and be eliminated quickly (an apparently wise provision, since the end products of protein digestion, in which their diet is high, is said to be the highly toxic uric acid, and urea). Their dental structure is designed to be used as weapons in killing their prey, quite unlike those of the frugivores. Their saliva is *acid*, and their skin has no pores.

The carnivores eat their prey raw; blood, bones, and all—something which would repulse most humans, who cook theirs, instead, which means they are literally eating dead matter, because that is what fire does to living tissue—it destroys it. When we pick a plant, it will retain its living form for many days after. When it finally wilts, we won't eat it. Cooked meat has little relation to the living flesh of an animal.

Now flesh is high-protein food, but fruit, which is the food of our closest animal relatives, and also, by the way, the only food that man was given to eat in the Garden of Eden story of the Bible, is a low-protein food. In fact, it is the lowest protein food.

Now let us consider one more thing. The first food that nature has designed for human infants is mother's milk. It is reasonable for us to assume that the composition of human milk can provide us with a good model for what the perfect human food should be, including its protein content, because it is on this food that the human infant must grow at a faster rate than it will ever grow again. And what do we find when we examine the chemist's report of the chemical composition of human milk? We find that it more closely resembles fruit than it does any other food. Its protein content is approximately 1 1/2%, which is roughly the same as fruits, and the lowest of all foods.

If we compare human milk with cows milk, which, unfortunately, is what many babies are fed these days, we find that cows milk is 3 times higher in protein. (The protein content of the carnivorous cat is almost six times higher than human milk.) We also find that the casein content of cows milk is 6 to 7 times that of human milk. It is the casein of cows milk that the Borden's company uses to make Elmer's glue! Most other foods have a much higher percentage of protein, with flesh reaching into the 20% category, and certain nuts, seeds, beans, and dried sea vegetables as much as 30% and higher.

It would seem natural from all of this to assume that humans are also frugivores, or fruitarians, and that the usual warnings that people receive who become vegetarians; that they must now make sure they find alternative sources of protein to replace the protein they will no longer be getting from flesh foods is a fallacy, based upon the notion that humans are naturally carnivorous beings, which we see we're not.

But, then, where does this notion come from? Why are we told by most nutritionists that almost all our sources of vegetable protein are inferior in quality to animal sources, such as flesh, eggs, milk, and cheese, and that we must eat these animal foods, or combine at one meal different sources of vegetable protein which laboratory tests tell us are complementary, so that we don't become protein deficient?

These ideas are, for the most part, a product of what is known as *The Complete Protein Theory*. We mentioned that protein molecules are made up of different arrangements of the 22 known amino acids.

Now, according to this theory, if any one of 14 of these amino acids is missing from the food we eat, the

body can synthesize it from other elements in the system, and can then build the protein it needs; but, if any one of the other 8 amino acids are missing, then protein synthesis cannot take place. These 8 amino acids are called the "essential amino acids," and the only foods generally considered to contain all 8 essential amino acids in the quantities considered necessary are from animal sources—flesh, eggs, milk, and cheese. Vegetable protein is considered to be lacking in one or another of the 8 essential amino acids in the quantities necessary, and that is why we are advised to combine them according to the determination of laboratory tests.

We are told all this also in spite of the observed fact of nature that other vegetarian animals, such as gorillas, cows, elephants, hippos, rhinos, etc., grow to their enormous sizes without having to resort to a high-protein diet, but rather eat nothing but raw vegetation, and although it is true that humans aren't gorillas, cows, elephants, hippos, or rhinos, they do have more in common with *these* animals than with the carnivores, in terms of their digestive systems.

What, then, is the source of this discrepancy between what simple logic would tell us to eat, and what we are told to eat by nutritionists? It would be good for us to know how this complete protein theory was arrived at, since we are told that it is so, but we are never told why. If we search through enough biochemistry textbooks, we will discover references to a group of experiments conducted in the 1930s by the biochemist William C. Rose. The purpose was to see the effects of a lack of certain amino acids in the diet. His subjects were graduate students of his university, and for the experiments he fed them a diet consisting of a mixture of pure amino acids, corn starch, sugar, butter-fat, corn oil, cod liver oil, inorganic salts, centrifuged lemon juice, flour, and vitamins. He alternately eliminated one or another of the 22 amino acids to see if their bodies would synthesize them. The way he measured whether or not this synthesis was taking place was by checking to see if the amount of the element nitrogen (the main element in protein) that was being taken in through the diet was the same as the amount being excreted. If the amounts were the same, then protein synthesis was considered to be taking place. If the amount being excreted was *more* than the amount being taken in, then protein synthesis was considered not to be taking place.

Now, based upon these experiments Rose concluded that 8 amino acids could not be synthesized by the human body, which are today called the *essential amino acids*," *and* that one must have them in the diet, and all in one meal.

There are several factors which must be considered concerning these experiments. The subjects of the experiments were 1930s college students, and it is very likely that they were in the habit of eating the average American diet of flesh, white flour products, sugar, and the like, whose dangers are becoming more apparent every day. In fact, they were probably eating worse than the average, being away from home, and eating in the college cafeterias and in fast food places. They were also likely to be in the habit of smoking and drinking, which was "in" in those days. It doesn't seem as if their diets were controlled at all before the experiments, because the diet used for the experiments themselves, which consisted *totally* of processed, chemicalized, and completely artificial substances showed an incredible lack of understanding of the whole nature of diet and its effects on human health. And even if we are *incorrect* in assuming that the students' diets were as we said, the diet used in these experiments was by itself enough to render these subjects as unfit on which to base any dietary standard for the entire human race.

Then there was the way Rose chose to measure if protein synthesis was taking place. He didn't actually see protein synthesis take place; he only inferred it from the amount of nitrogen being excreted by the subjects. It would seem that what *that* means is a matter of interpretation. When the human body is overloaded with some element, it will usually try to eliminate it in some way, and it will often do so when the person stops taking that substance in. For instance, if you are in the habit of eating large amounts of dairy products, and you suddenly stop, you might find yourself expelling large quantities of mucus. You could say that this proves you need more dairy products in your diet, but a more correct interpretation would be that by decreasing the burden on your digestive system, your body is taking this opportunity to eliminate, in the form of mucus, the toxic wastes it has been storing all that time.

More than anything else, these experiments completely ignore the observed fact that people can fast for very long periods of time, and experience a profound rejuvenation by doing so. The length of time people have been known to fast would amaze most of us. Eighty days and more is not uncommon. In trying to be consistent with this protein theory, the medical profession will claim that when you fast, you feed on your own bodily waste, and that after you use up your wastes, you start feeding upon your own tissue, making fasting at this point very dangerous, an explanation which is inconsistent with simple reason as well as with the experience of people who have fasted. The human body does not feed on wastes, which are the end products of feeding. During a fast it eliminates stored up wastes.

And finally, further work in the field of biochemistry and the amino acids has not confirmed the work of Rose as one might have thought. Here are typical quotations from biochemistry textbooks:

From *Biochemistry of the Amino Acids, Vol. I*, by Alton Meister:

> "It is evident that an amino acid may be 'essential' or 'nonessential' depending upon the criterion employed ... the age of the animals, the presence in the diet of other factors (e.g., vitamins), and the existence of certain physiological and pathological conditions."

From *Certain Biochemical Findings in Man in Relation to Diet* by A. R. F. Walker, from the annals of the New York Academy of Sciences:

> "Absence ... of relevant clinical and pathological stigmata in people accustomed to 'deficient' intakes cannot but point to the strong probability that the particular recommended intakes are too high... the situation regarding animal protein calls for reexamination."

And from *Chemistry of the Amino Acids, Vol. I*, by Greenstein and Winitz:

> "In few areas of scientific description is the inadequacy of language so revealed as in the attempt to distinguish clearly the so-called nonessential amino acids from the essential ones, and this may well be due to the fact that growth has no standard of reference. The looseness of such phrases as 'optimal' or 'maximal' growth employed in these pages is obvious."

This last point is interesting, because we know that a high-protein diet stimulates the speed and size of growth. Now we can observe in nature that animals will live to about ten times the length of time it takes them to reach sexual maturity, but in the case of humans it is not even close to that, no doubt because of our unnatural ways. Accordingly the faster we mature, the shorter we can expect to live. Large size may be an advantage in some of our specialized sports events, but when we consider agility and endurance of body and mind, we find it is not an advantage, and, if anything, is a disadvantage.

In the face of all this, it is just not scientific to insist that human beings must eat flesh, eggs, milk, and cheese, or combine vegetable proteins according to the calculations of some laboratory. The scientific method is to account for observed facts, not to ignore them. If you encounter observed facts that contradict your theory, it is your theory which must be scrapped, or at least revised, not the fact. That is the scientific method. The physical sciences have had fantastic success in discovering the laws of the physical universe, and have demonstrated it by the technologies it has made possible, but the life sciences have not had such successes, in spite of the claims of medical science. The laws of biology have never been explained in terms of the laws of physics, and human potential remains unknown. In fact, for the most part, what are thought of as advances in the life sciences are really advances in applied physics; namely the ability to observe and experiment on cellular life. We can say that the life sciences have been failures because the conclusions drawn from these experiments and observations have led to some of the most brutal and barbaric medical practices imaginable, such as chemotherapy and radiation treatments for cancer, unbearably painful diagnostic techniques (as well as those that proved to be cancer-causing, such as mammography, which is meant to *detect* cancer) and the mass blood poisoning known as vaccination. Although still difficult for most people to accept, the failure of these practices are growing more and more apparent.

Said the famous scientist Alexis Carrel in his book *Man, the Unknown*, "In fact, our ignorance is profound," and most true scientists would still not disagree. Popular writers who convey the theories of technicians in the scientific field as certain facts cause mass misunderstanding. The public is still not well educated. It believes in the pronouncements of scientists with blind faith. The swine-flu disaster was a good example of what can happen with the public's attitude toward the scientific profession in general, and medical science in particular.

Concerning protein, Professor Arnold Ehret, in 1922, wrote the following:

> "The error of high-protein foods as a necessity of health ... is in its consequences and its effect just the opposite of what it should be; it is the most tragical phenomenon of western degeneration. It produced at the same time the most dangerous, most destructive habit of gluttony; it produced the greatest madness ever imposed upon mankind, that is, to endeavor to heal a disease by eating more, and especially, eating more high-protein foods. It is beyond possibility to express in words what the error of high-protein foods means."

What the greatest madness ever imposed upon humankind is, is a question one could kick around for a while. The madness of high-protein foods undoubtedly deserves a place among the candidates. This question aside, however, I think we can say that time has borne the ol' professor out. The day will yet come when the complete protein theory takes its place along side the rest of the theories of modern medicine, as an example of the kind of mad pseudo-science which still deludes and exploits humanity.

Article #3: Proteins

Proteins are organic compounds composed of amino acids. There are hundreds of types of proteins, each being identified by a combination of amino acids which constitutes it.

Amino acids usually contain nitrogen, hydrogen, oxygen, carbon, and sometimes sulphur and are synthesized by the body cells from the air and water or derived from food which is eaten.

The word "protein" signifies "of first importance."

Proteins form the principal elements of the skin, hair, nails, connective tissue, and all other organs. They exist everywhere in the body in cells which make up all the tissues, bones, cartilage, muscle, fibers, glands, and organs.

Among the most important proteins are substances called enzymes which are catalysts which accelerate the vital biochemical processes enabling a cell to do in one minute what would otherwise require many years.

Most hormones are proteins or derivatives of amino acids.

Proteins are manufactured by cells.

Human proteins are different compounds than animal proteins and plant proteins. Thus it is necessary to break down (digest) proteins entering the body into fundamental amino acids which are then recombined into human proteins. Complex animal proteins require a much greater expenditure of effort by the human body cells in the breaking down process than do the more simple plant proteins.

At the same time, a great quantity of wastes, toxins, and poisons accompanies the animal proteins.

These foreign substances are very harmful to the human body and contribute to progressive deterioration

of the health, thus it is strongly recommended that all animal protein be excluded from the diet of humans.

A *normal, healthy* adult body, living in obedience to the rules of health requires very little or no solid food protein to maintain superb health. Since all of the elements constituting amino acids (nitrogen, oxygen, hydrogen, carbon, sulfur) are present in the air we breathe and in the body's storehouse, there is no need to burden the body with large quantities of food in an effort to supply protein. The body's processes easily produce the amino acids and proteins it needs from the constant supply of basic elements available to it.

It is wise to avoid eating all animal protein or too much vegetable protein to insure good health.

EAT SPARINGLY OF PROTEIN FOODS!

Article #4: Protein Supplements by Hannah Allen

Protein supplements should never be used. Dried and crystallized tablets, or protein powders, or various protein concoctions, are even more dangerous than other food supplements, because the consequences of protein overconsumption, especially as an isolated food element, may be disastrous.

To quote Dr. Alec Burton, N.D., D.O., D.C., eminent professional Hygienist in Australia: "A food element is a part of a complex food which, in the living plant or animal, almost invariably, contains some, even if only in minute quantities, of all the various food elements—proteins, carbohydrates, fats, minerals, and vitamins... The body is adapted to the use of food as a complex mixture of food elements. We do not eat food elements or nutrients in isolation when we consume a natural food. When we eat these items out of their natural contexts with other nutrients, … the nutritional impact is different and can lead to unfavorable consequences."

The potential damage and artificial deficiencies that may be created through the use of protein supplements and other supplements are considerable. Just as an excess of nitrogen in the plant will create artificial deficiencies of other elements and prevent fruiting, so stimulation to the human organism produced by supplementation will disturb natural balance. This is the "Law of the Minimum": "The development of living beings is regulated by the supply of whichever element is least bountifully provided." (This has been long known in plant life.) Using supplements, by creating an overabundance of some elements, creates an artificial shortage of other elements, known and unknown, and the element in shortest supply determines our development.

A very fine dentist and his charming wife, who are staunch advocates of so-called "natural" supplementation, told me that they know that supplements are beneficial and necessary, because "if they don't take their supplements, they just drag around."

What better proof could there be of the *stimulating* effect and addictive nature of supplementation? A Hygienist can skip meals, or eat fruit only for several days, or eat his regular diet of fruits, vegetables, and nuts, and continue to be his vital, sparkling, indomitable self, with no crutches and no pills.

Manufactured concentrates are sold by commercial interests who are determined, for their profit, to maintain the position that substitute and compensatory substances can provide superior nutrition. Supplements are unnecessary, expensive, stimulating, addictive, and create artificial deficiencies and pathological changes in the human organism.

The richest sources of protein and all other food elements are in living food: raw nuts and seeds, fruits and vegetables, and it is here they are found in ideal combinations with other substances (known and unknown) essential to their full utilization. There is no better way: When you eat a variety of whole, raw foods, in accordance with Hygienic principles, you need not be concerned about amino acids or vitamins or minerals or anything else—everything will be adequately supplied.